



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,000	07/08/2003	Mario Meggiolan	CAM3-PTO39.2	8134

3624 7590 03/15/2005

VOLPE AND KOENIG, P.C.
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

JULES, FRANTZ F

ART UNIT	PAPER NUMBER
----------	--------------

3617

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,000

Applicant(s)

MEGGIOLAN, MARIO

Examiner

Frantz F. Jules

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-56 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 30-40, 42-45, 47, 48 and 50-56 is/are rejected.
- 7) ☒ Claim(s) 41, 46 and 49 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7 and 12/08/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

157

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

In the abstract section, line 7, the designation "(Figure 18)" should be deleted.

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 30 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,688,704.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of U.S. Patent No. 6,688,704 except for a bicycle wheel hub comprising no extension on an inside edge thereof. The general concept of simplifying a structure by removing component thereof falls within obvious reduction of part and duplication/reduction of parts which accomplish essentially the same function carry no patentable weight. It would have been obvious to one of ordinary skill in the art at the

Art Unit: 3617

time the invention to modify claim 1 of US Patent No. 6,688,704 to include fabric strips with no extension in order to reduce the cost of the fabric strips.

4. Claims 35-36 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,688,704. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of U.S. Patent No. 6,688,704 except for a bicycle wheel hub comprising a tubular member which is not hollow. The general concept of simplifying a structure by removing component thereof falls within obvious reduction of part and duplication/reduction of parts which accomplish essentially the same function carry no patentable weight. It would have been obvious to one of ordinary skill in the art at the time the invention to modify claim 1 of US Patent No. 6,688,704 to include a non-hollow tubular body in order to reduce the cost of manufacturing the tubular body.

5. Claims 37 and 55 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,688,704. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 2 of U.S. Patent No. 6,688,704 except for a bicycle wheel hub comprising a tubular member which is not hollow. The general concept of simplifying a structure by removing component thereof falls within obvious reduction of part and duplication/reduction of parts which accomplish essentially the same function carry no patentable weight. It would have been obvious to one of ordinary skill in the art at the time the invention to modify claim 2 of US Patent No.

Art Unit: 3617

6,688,704 to include a non-hollow tubular body in order to reduce the cost of manufacturing the tubular body.

6. Claim 37, 39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,688,704. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 3 of U.S. Patent No. 6,688,704 except for a bicycle wheel hub comprising a tubular member which is not hollow. The general concept of simplifying a structure by removing component thereof falls within obvious reduction of part and duplication/reduction of parts which accomplish essentially the same function carry no patentable weight. It would have been obvious to one of ordinary skill in the art at the time the invention to modify claim 2 of US Patent No. 6,688,704 to include a non-hollow tubular body in order to reduce the cost of manufacturing the tubular body.

7. Claim 42 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,688,704. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 4 of U.S. Patent No. 6,688,704 except for a bicycle wheel hub comprising a tubular member which is not hollow. The general concept of simplifying a structure by removing component thereof falls within obvious reduction of part and duplication/reduction of parts which accomplish essentially the same function carry no patentable weight. It would have been obvious to one of ordinary skill in the art at the time the invention to modify claim 2 of US Patent No. 6,688,704 to include a non-hollow tubular body in order to reduce the cost of manufacturing the tubular body.

Art Unit: 3617

8. Claim 43 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,688,704.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 5 of U.S. Patent No. 6,688,704 except for a bicycle wheel hub comprising a tubular member which is not hollow. The general concept of simplifying a structure by removing component thereof falls within obvious reduction of part and duplication/reduction of parts which accomplish essentially the same function carry no patentable weight. It would have been obvious to one of ordinary skill in the art at the time the invention to modify claim 2 of US Patent No. 6,688,704 to include a non-hollow tubular body in order to reduce the cost of manufacturing the tubular body.

9. Claim 44 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,688,704.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 6 of U.S. Patent No. 6,688,704 except for a bicycle wheel hub comprising a tubular member which is not hollow. The general concept of simplifying a structure by removing component thereof falls within obvious reduction of part and duplication/reduction of parts which accomplish essentially the same function carry no patentable weight. It would have been obvious to one of ordinary skill in the art at the time the invention to modify claim 2 of US Patent No. 6,688,704 to include a non-hollow tubular body in order to reduce the cost of manufacturing the tubular body.

10. Claim 55 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,688,704.

Art Unit: 3617

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 7 of U.S. Patent No. 6,688,704 except for a bicycle wheel hub comprising a tubular member which is not hollow. The general concept of simplifying a structure by removing component thereof falls within obvious reduction of part and duplication/reduction of parts which accomplish essentially the same function carry no patentable weight. It would have been obvious to one of ordinary skill in the art at the time the invention to modify claim 2 of US Patent No. 6,688,704 to include a non-hollow tubular body in order to reduce the cost of manufacturing the tubular body.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 30-35, 38, 40, 45, 47-48, 50-54, are rejected under 35 U.S.C. 102(b) as being anticipated by Jones (US 4,832,414).

Jones discloses a wheel hub (88) having a tubular body member made of a plurality of layers of structural fiber fabric (58) incorporated in a plastic material matrix as disclosed in col 6, lines 31-34, said layers including one or more fabric strips (56) wrapped around at least one axially limited portion of the hub body as well as a plurality of fabric plies (58) extending along the hub axis. Since the structure of a tubular member is claimed, the intended use of the tubular member in a bicycle is given no weight.

Art Unit: 3617

At least some of the strips (58) or plies are alternated to each other since multiple winding layers are used around the wheel hub as disclose in column 3, lines 38-39, in accordance with claims 31 and 53.

At least one of said wrapped strips (56) is provided at one end portion of the hub as shown in the figures in accordance with claims 32-33

At least one of said wrapped strips (58) is provided at an intermediate portion (50) of the hub (88) as shown in fig. 7, as required by claim 34.

The layers of fabric strips (56) and fabric plies (58) including rectilinear cuttings on at least one lateral edge thereof since the edges of the strips and plies have straight edge cuttings as seen in the figures as required by claims 6, 10, and 27.

At least some of said plies (58) covering an angle of less than 360 degrees in the circumferential direction since the hub is completely covered by the plies (58) and extends for the entire length of the hub as required by claims 11-12.

The wheel hub (88) including a central cylindrical section (16) and two wider bell-shaped end sections (18), the thickness of the tubular body increasing progressively from the central section toward the end section (18), as required by claim 17.

The tubular body having a central part of constant cross-section at the center line (16) and end parts (12) with constant section but larger than the central section (16) and intermediate parts (50) with increasing sections, as required by claim 18.

The fabric strips and fabric plies constituting the same layers of fabric material selected among carbon fibers, glass fibers, Kevlar fibers, or any combination thereof, positioned on the hub as disclosed in column 2, lines 60-65, in accordance with claims 19, 29.

Art Unit: 3617

Said hub body having a shape which is symmetrical relative to an intermediate plane orthogonal to the hub axis, said end sections including annular flanges (52), in accordance with claims 20, 22-24.

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claim 56 is rejected under 35 U.S.C. 102(b) as being anticipated by Lew et al (US 6,347,839 B1).

Lew et al discloses a bicycle wheel hub comprising a plurality of fabric layers spaced from a central hub axis, each of the plurality of fabric layers (14) having fibre fabric incorporated in a material matrix, wherein the plurality of fabric layers are integrated and the fibre fabric comprises at least one of carbon fibres, glass fibres, and aramid fibres, see abstract section.

Allowable Subject Matter

15. Claims 41, 46 and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the references of record suggests a bicycle wheel hub wherein the hub body has a shape which is asymmetrical relative to the intermediate plane orthogonal to the hub axis in the manner defined in the instant claim 49.

Conclusion

Art Unit: 3617

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Lew et al, Bass et al, Daniels et al, Woelfel, Ware, Shumakerm and Gageby are cited to show related wheel hub having a tubular body covered by a layer of reinforced fiber in a plastic material matrix.

Casebolt is cited to show a related composite band made of layers of fabric cloth covered by epoxy resin-impregnated material.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules
Examiner
Art Unit 3617

FRANTZ F. JULES
PRIMARY EXAMINER



Application/Control Number: 10/615,000

Page 10

Art Unit: 3617

FFJ

March 8, 2005